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WHY ARE CANADIANS DYING OUT?

by

Karol J Krótki

Department of Sociology
University of Alberta
Edmonton, Alberta

Presidential Address, Academy of Humanities and Social Sciences,
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WHY ARE CANADIANS DYING OUT?

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Précis

The fact of Canadians "dying out" in the statistical sense since the early 1970s is undeniable. Unless in fertility habits change Canadians will begin to die out in the arithmetical sense by the turn of the century. The likelihood of such a change is small, partly because of the irreversibility of sterilization. More generally, it is inconceivable - at least to social scientists - that such a fertility reversal could take place.

Some mechanics of fertility decline are easy to observe: proportions married decline, age at marriage rises, incidence of divorce increases, marital fertility becomes low. It is more difficult to observe other factors: the true impact of abortion, the interactions of female labour force participation with fertility, the changing value systems and tastes.

Still more difficult is to make sense of the perceptions prevailing in the society: poverty stricken Canada - untrue under any objective indicator, female selective discrimination in the labour market - its diminution carefully concealed, feminism with its uncertain role in fertility, sexuality and sensuality.

One unequivocal economic theory should provide answers in the next year or two: small generations are at an advantage in comparison with large generations. The first annual cohorts of baby busters started entering the labour market. Observers of the social scene will watch for signs of behaviour postulated by the theory: less unemployment among the young, higher wages for the young, increased euphoria, earlier marriages, more children.

WHY ARE CANADIANS DYING OUT?

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1. Are Canadians dying out?

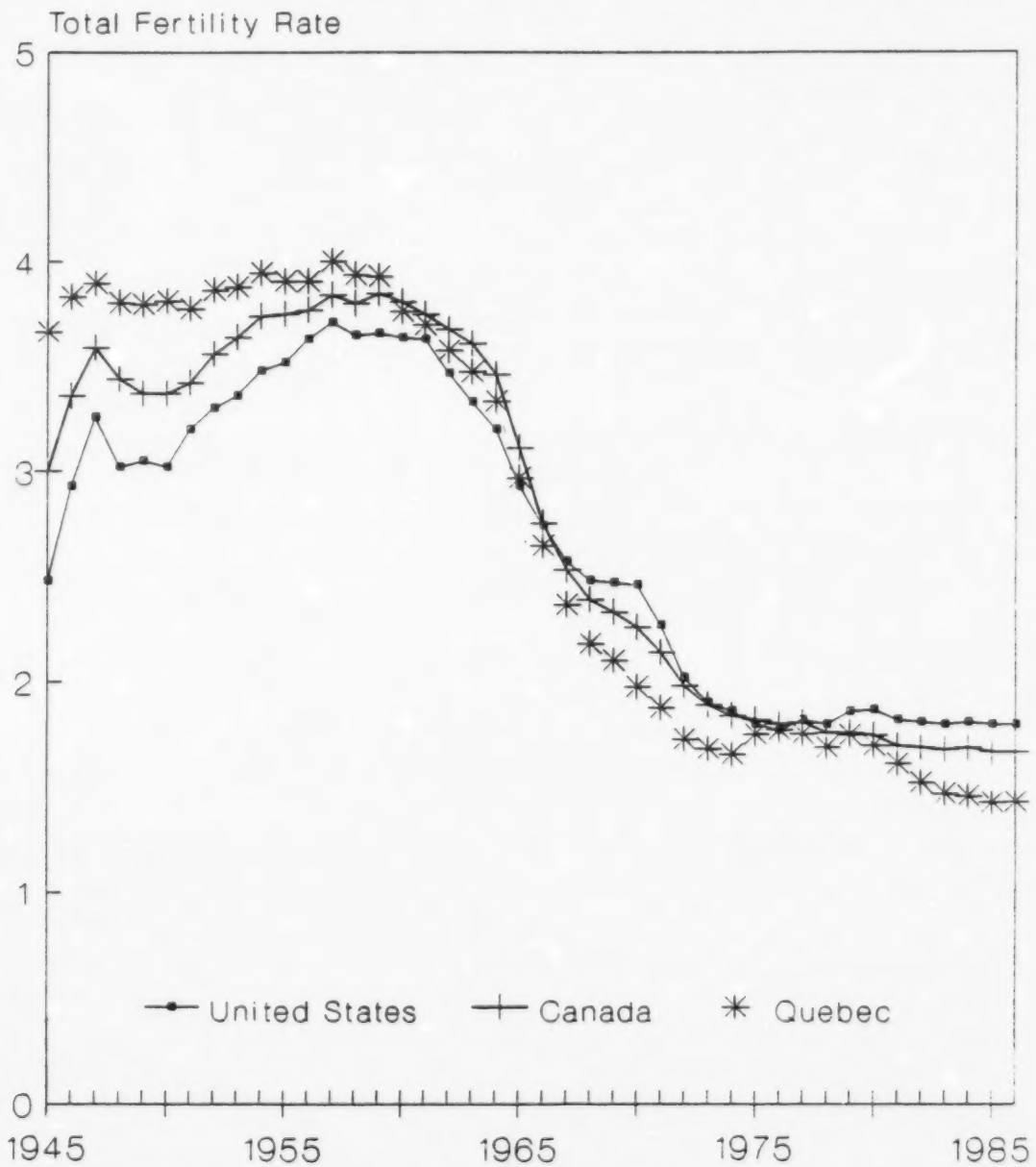
Before answering the difficult question why are Canadians dying out, one has the logical responsibility of asking whether they are dying out at all, an easier question than the "why" question. There is no doubt that our society is dying out in a statistical sense: since about 1972 the current generation has ceased reproducing itself. This fact does not yet show in annual numbers. The natural increase is still four times greater than the increase through the much more newsy immigration. Although the average statistical mother "shirks her duty to Queen and country", there are so many baby boom mothers around that their fertility below replacement does not yet show. But there is no doubt: the statistical mother is replaced by three-quarters of a daughter or, less gruesomely, 100 mothers are replaced by 75 daughters.

2. The reversal of the Quebec-Canada-USA order

The drop has been phenomenal. For many decades the demography of North America could be summarized by three fertility curves. The USA curve was lowest, Canada outside Quebec was in the middle, and Quebec was highest. From the beginning of the century they went down together to reach a nadir in the thirties, then they went up together in the baby boom explosion, always preserving the same monothonic order. In the late sixties an extraordinary flip over took place. All three curves went down together, but USA more slowly, and Quebec faster. The three curves move now through history in reverse order: Quebec lowest, Canada outside Quebec in the middle and the USA the highest. For these trends since World War II see figure 1. To those

Figure 1: Fertility Trends: Canada, United States and Quebec

1945-1986



Sources: 1945-1982, Romaniuc, Statistics Canada (1984)
1982-86, Vital Statistics Canada Ch.1., Demographic Yearbook
Population Data Sheet, Population Reference Bureau

with either an historical bent or with a sensitivity for the paradoxical, this is a profound change indeed.

3. Will "it" show, and if so, when?

The present (late 1980s) all-country rate below replacement is 1.7 children per woman as against the 2.1 required for replacement and eventual zero population growth. The difference seems to be small and yet it is portentous. Allow me to cite an opening in one of my undergraduate courses: "have two children and the population dies out, have three and it explodes". It is self-evident that small oscillations around the figure of 1.7 will not affect the essence of the argument. Small downward movements will bring negative growth by the turn of the century. Small upward oscillations will extend the period till the first quarter of the next century. The younger members of this audience will be still around. The actual timing of the emergence of negative population growth does not depend so much on the replacement level as on the baby boom mothers leaving the reproductive ages: born during the twenty years 1946-66 the most recently born will be leaving the reproductive ages in 1996, assuming age 30 to be the end of effective reproduction. And in a modern society, reproduction after 30 does not amount to much in the aggregate.

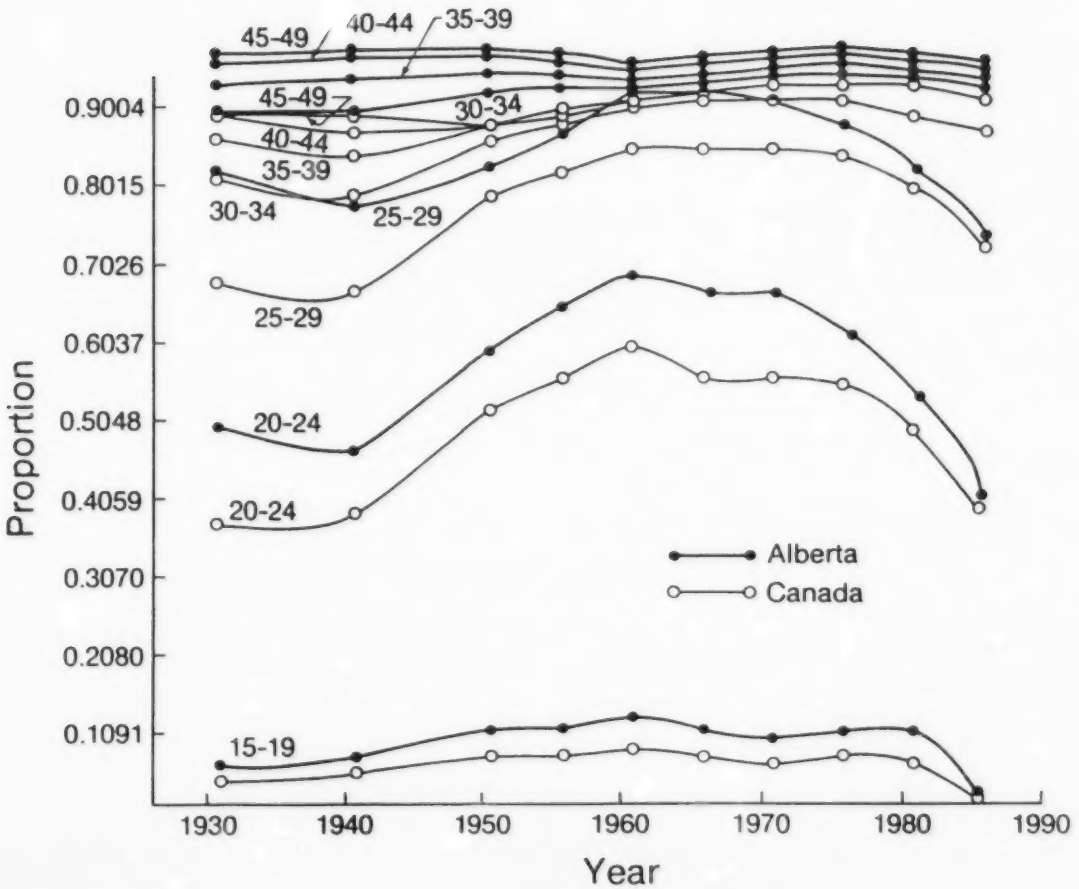
The five European countries that already report yearly negative growth (Bourgeois-Pichat 1987) were tinkering with below replacement fertility for forty years and longer. Hitler employed the whole German state apparatus and inspired it with policies that only in his philosophy and ethics could have arisen, very thorough going and all penetrating; yet he never got the rate back to the replacement level.[1] Several other European countries are on

the brink of joining the five in the realm of negative growth. In short, Canada is doing nothing special for a developed country; behaving just like the others (e.g., Hagmann 1985, Hoffman-Nowotny et al. 1984; Le Monde 1989).

According to educated guesses such a return to replacement fertility cannot be anticipated. A leading German demographer said so (Höhn 1986, 1989) during the family symposium organised jointly by the Federation of Canadian Demographers and The Royal Society of Canada in November 1986, in Ottawa. But demographers grouped around the League of Nations could not in 1945 envisage the population of the USA ever growing beyond 135 million. And who would imagine that Catholic Italy after sending millions of its people abroad, would suddenly become a country of immigration. It was first, I believe, a Canadian demographer, Marc Termot, who identified this incredible fact in 1986 in Cosenza, at the meetings of the Association Internationale des Démographes de Langue Française. So what are the realistic chances that the total fertility rate, because that is the measure we have been using so far, will go back to 2.1, so that Canadians stop "dying out"?

4. Proportions ever married declining

Contrary to some popular beliefs, most of human reproduction still takes place within wedlock. Thus, the proportions marrying are the first variable to look at during a discussion of fertility. In figure 2 we have the proportion of women married at each five year age group since 1930. One can see that the two age groups important for fertility, 20-24 and 25-29, show consistent declines since 1960 for the country as a whole. Curves for Alberta have been drawn in to show that while a province has a history of



Source: Census reports

Figure 2: Proportion of ever married women; Alberta and Canada, 1931-1984

proportions marrying (and of fertility) above the national level, it shadows the national behaviour. Eventually the differentials narrow and disappear.

5. Age at first marriage rising

In figure 2 the proportions married at older ages showed only mild declines, if any at all. Apparently, women were eventually getting married, but did so at later ages. How much later is shown in figure 3. Until the 1970s the mean and median age at first marriage of brides and grooms was declining for a cumulative total of, say, three years in general over the first 35 out of the 45 years shown on figure 3. Over the next ten years almost the entire pattern was reversed.[2] Again Alberta is drawn in to show that a province with ages at first marriage over 40 years, lower than the country as a whole, has now come close to the national level. Such convergences and disappearances of differentials in demographic variables take much of the fun out of socio-economic analysis.

The flat curve of the mean age at first marriage of brides from 1960 to 1970 draws attention; over the same period the mean age of grooms continued declining. Consequently, the age differences between brides and groom at first marriage narrowed. These were the first baby boom brides entering the marriage market in increasing numbers and not finding enough male partners, slightly older as the custom insists, from the previous smaller generation. This phenomenon is known in literature as marriage squeeze. Being resourceful North American women, they did not passively accept this situation. They engaged in "baby snatching" (and other unorthodox practices) to provide themselves with partners from outside the traditional, and to them unfavourable, marriage market.

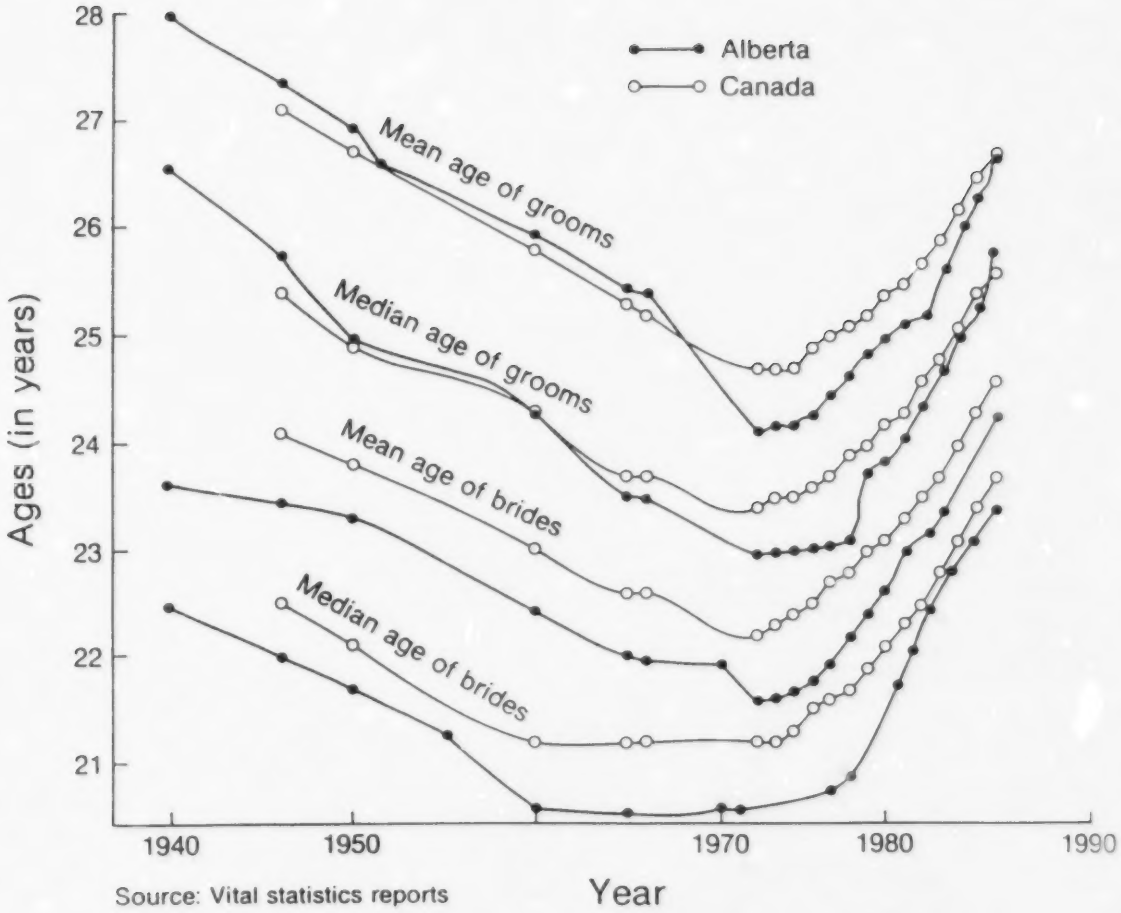


Figure 3: Mean and median ages at first marriage of brides and grooms; Alberta and Canada, 1940-1985

Age at first marriage is still related to age at first birth and average age of child-bearing (the latter on approximation to average length of generation), though the link is looser than it was. When childless women, successful in the labour force reach their mid 30s, they realize that their continuing success flies in the face of the biological clock. Some decide to have a late child. Such events are newsy, but numerically insignificant. Age at marriage (and at birth) has been delayed recently by three years, because of decisions by large number of brides in their 20s, not because of a few at 35.

6. Proportions divorcing and divorced increasing: correlates of divorce

In the previous two sections we have shown how the importance of marriage declined in two ways: fewer people married and they married later. Now I shall address the question of what happens to the marriages. They are subject to divorces and separations to a greater extent than hitherto. Figure 4 shows the probabilities of first marriage dissolutions, by marriage duration and selected characteristics of women. Apart from the six characteristics whose cumulative effect is summarized in figure 4, two have been dropped: religion and education, because they do not explain much.[3] For example, one does not divorce, not so much because one is catholic, but because one is religious, irrespective of whether catholic or protestant.

It is clear from figure 4 that certain combinations of characteristics are more favourable to marriage survival and certain combinations are particularly unfavourable, almost deadly, to marriage. It is not often that all the unfavourable characteristics are combined in one bride, as that early divorce would be a virtual certainty. Figure 4 shows no such case, though

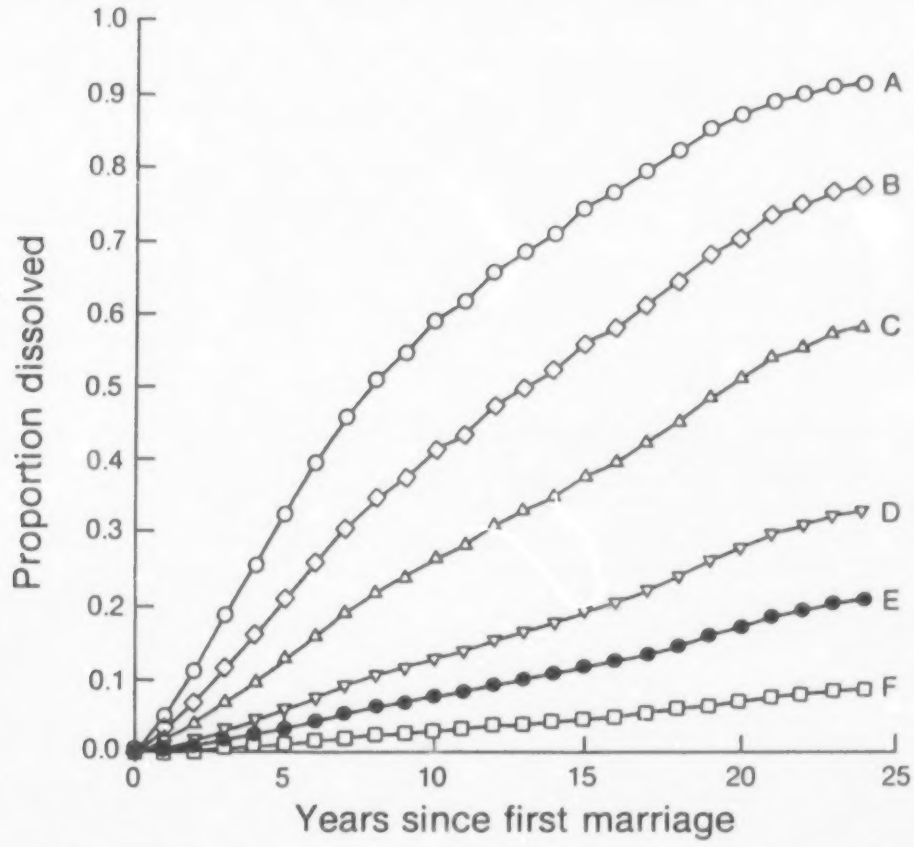


Figure 4: Proportions of marriages dissolved by marriage duration for reference and comparison groups, Canada 1984

	Married	Premarital birth	Cohabited before marriage	Church attendance	Residence	Age limit at first marriage	Relative risk
A	1975 or after	yes	no	rarely	small urban	≤19	6.28
B	1965-1974	yes	yes	rarely	small urban	≤19	3.76
C	1975 or after	no	no	sometimes	large urban	≤19	2.19
D	1965-1974	no	no	sometimes	large urban	20-21	1.00
E	Before 1965	no	no	rarely	large urban	20-24	0.59
F	Before 1965	no	no	sometimes	farm	≤19	0.23

Source: adapted from PRL Reprint Nr 90, p. 404

combination A after 25 years results in 90 per cent dissolutions. Recent marriages by youngsters are the greatest contributors to the relative risk shown in the last column of figure 4.

We do have some objective data on the incidence of promiscuity, as a rule anti-natalist in its impact.[4] Table 1 shows that a quarter of births are conceived before marriage, a proportion increasing in recent years. Most premarital conceptions result in shot-gun marriages. However, to see in them an indicator of promiscuity requires assuming a specific value system, that might not prevail in Canada. In the past in Lower Saxony and other parts of Europe and the world, the young man would not marry until the future bride became pregnant. Shot-gun marriages were indicators of a pro-natalist value system. Which is it in Canada? The fulfilment of a welcome expectation or reaction to dire necessity? The answer will colour our fertilitiy forecasts.

7. Abortion and sterilization as contraception

In table 2 the recent history of contraceptive use in Canada is summarized. The main message is the dwindling importance of the pill and the increasing importance of sterilization. There are also two minor messages: notably the lower use of the rhythm method in Quebec, and the decline in the application of withdrawal in the country as a whole. Both methods are traditional, one church-approved, with a degree of effectiveness, apparently no longer acceptable.

The sterilizations in table 2 add up to 58.4 per cent of currently married contraceptive users, the highest reported proportion in the world.[5] To those who consider sterilization a crude method of contraception, both physiologically and psychologically, this high proportion

TABLE 1. Timing of first birth according to first marriage, Canada 1984

Women with first birth	n	premarital conceptions
Before marriage	279	8.6%
7 months or less after marriage	468	745 or 23.0%
8 - 19 months	1044	
20 - 59 months	1150	
60 months and more	311	
all first births	3252	
childless married	625	
...	3877	
childless never married	1438	
all respondents	5315	

Source: tabulations from Canadian Fertility Survey 1984

TABLE 2. Currently married contraceptive users by method, Surveys of various years and regions, Canada

Method	Toronto[1] 1968 (N=1,132)	Quebec 1971 (N=386)	Edmonton[2] 1973 (N=442)	Quebec[3] 1976 (N=325)	Canada 1976 (N4)	Canada 1984 (N=2,400)
Age range	18-45	< 45	18-54	20-40	≥ 15	18-49
Pill	43.2	38.1	46.2	28.8	39.2	15.0
IUD	3.1	3.9	5.7	8.5	6.0	8.0
Diaphragm	9.5	4.2	3.3	u	2.2	1.4
Condom	16.7	6.6	8.4	8.2	6.0	10.8
Rhythm	9.0	32.0	4.3	15.6	6.1	3.0
Withdrawal	8.8	7.9	2.9	4.3	3.4	1.3
Douche	3.5	1.5	u	u	u	u
Foam and jelly	3.4	2.2	u	1.1	2.5	0.7
Other	u	1.1	u	1.8	4.1	0.6
Female ster.	8.7	1.5	u	21.3	30.5	41.8
Male ster.	1.1	1.0	u	10.0	u	17.6
TOTAL	107.0[5]	100.0	100.0	100.0	100.0	100.0

1 Includes women married only once.

2 Refers to women of all marital statuses. See table 4.4 in Krishnan and Krótki 1976; also Odynak 1987.

3 Includes women aged 20-40 in March 1976, married for at least five years.

4 The survey was of adults aged 15 and older. An estimated 1,000 were aged 15-49.

5 Total exceeds 100 percent because for women using more than one method, all methods used are included.

Note: u = unavailable.

Source: Romaniuc, 1984, table 3.1. Also included in PRL Reprint Nr 74, p. 215.

in a gadget-minded society calls for an explanation. At this stage of social investigations in Canada, social scientists are unable to give such an explanation. What can be said with certainty is - at least - that those afflicted could not contribute to a reversal of the fertility trend, should such a reversal be launched by others.

Because of the importance of sterilization in Canada additional attention is given to the matter in table 3. The importance of religion in the first quarter of table 3 is not striking but at least the four groups (males and females in Canada and in Alberta) illustrate consistent behaviour: Catholics sterilize somewhat less than Protestants.

The reported influence of religiosity in the second quarter of table 3 is puzzling: the more frequent church attendance the higher the sterilization. One wonders what set of psychological characteristics leads to the connection. Desire for ultimate, simplistic solutions? Need to compensate for abusing nature? In the Canadian Fertility Survey 1984 no attempt was made to answer such questions, because they were not anticipated.

In the third quarter of table 3, the behaviour of women both in Canada and in Alberta with regard to sterilization is shown to have a high reverse correlation with education: the less educated the more sterilized.[6]

In the fourth quarter of table 3, the influence of religiosity and divorces has been added (already used in figure 4). The purpose of this addition is to contrast religiosity and divorces with religiosity and sterilization in the second quarter of table 3. Religiosity and divorces give the expected result: the more religiosity the less divorce. Religiosity and sterilization give, as indicated in the discussion of the second quarter, an unexpected result: the more religiosity, the more sterilization. Some of

TABLE 3. Sterilizations by sex, religion, religiosity, and education; divorce by religiosity, Canada and Alberta 1984

		CANADA		ALBERTA	
		F	M	F	M
		Percentages			
RELIGION:	Catholics	34.5	12.2	33.9	10.7
	Protestant	38.7	14.8	34.2	15.5
	Other	30.7	10.1	24.2	7.1
RELIGIOSITY (church attendance):	Weekly	43.8	14.0	40.1	12.1
	Sometimes	33.1	12.3	33.5	12.3
	Rarely	32.4	10.9	29.1	9.0
EDUCATION:	≤ 8	68.8	9.1	76.3	10.0
	9 - 11	47.4	16.5	49.5	19.7
	12 - 13	30.0	13.7	33.3	10.7
	≥ 14	25.5	9.5	21.8	12.4

Divorce probabiltiy for women years after marriage:

		5	15	25
RELIGIOSITY (church attendance):	Weekly	0.04	0.10	0.18
	Sometimes	0.09	0.19	0.27
	Rarely	0.16	0.33	0.47

N.B.: The arrows are to draw attention within each characteristic to the category with greater incidence.

Source: tabulations from Canadian Fertility Survey 1984

our discussants suggested that high religiosity is akin to low education; hence arrows of the same direction in the second and third quarters of table 3 (with arrows of opposite direction in the fourth quarter).

In our bewilderment with regard to the influence of religion and religiosity we have recourse to table 4, where a comparison is made of the behaviour of Catholic women in Quebec and in Alberta. About 10 percentage points more Catholic women use contraceptive methods in Quebec than in Alberta; of the contraceptive users 63 per cent are sterilized in Quebec in comparison with 58 in Alberta. Quebec men report a markedly higher contribution to sterilization (19) than Alberta men (12). Depending on one's value premises one could see, in the higher Quebec percentage, the weak presence of macho characteristics or a greater readiness to share the burden of modern life.

The problem of abortion is avoided by the statisticians of Canada, as it was by the co-directors of the Canadian Fertility Survey 1984. Many reports are available on attitudes towards abortion (e.g., Balakrishnan et al. 1988). Gallup made quite an industry out of it, and historical and legal works have been published (e.g., McLaren & McLaren 1986), but it is not known how the differential attitudes, the historical experience and the legal framework affect the actual incidence and patterns of abortion. Once an attempt to measure the incidence of abortion in Canada was undertaken through the randomized response technique (RRT; Krótki & McDaniel 1975, 1977, McDaniel & Krótki 1979). When in Alberta, in 1974, 4000 legal abortions were registered, the public opprobrium was still such that only 2000 were admitted in face-to-face interviews, somewhat more through anonymous questionnaires, and 14,000 through the RRT. On commonsense grounds it is difficult to accept

TABLE 4. Cahtolic married women 18-49, their contraceptive practices
Alberta and Quebec 1984

	A	Q
All married women	100.0	100.0
Using a method	65.8	75.1
Pregnant, etc.	17.0	13.0
Sterile	9.9	9.1
Not using a method	7.3	2.9
Users:		
Female sterilization	46.1	43.8
Male sterilization	11.9	18.9
Pill	10.5	16.9
IUD	6.1	6.3
Daiphragm	1.5	.0
Condom	6.3	8.2
Foam	.0	.0
Rhythm	3.1	3.7
Withdrawal	3.0	1.0
Other	1.5	1.2

Source: tabulations from Canadian Fertility Survey 1984
Quebec column in PRL Reprint Nr. 90, table 6.

that, this second crudest method of contraception would be so important in such a gadget minded society as Canada. In many societies, abortion is the poor man's contraception, the incompetent man's contraception. One is reluctant to accept that it has this status in Canada. But then one could harbour similar thoughts with regard to sterilization, and yet Canada is the world leader in reliance on sterilization.

8. Milder forms of contraception

In comparison with the previous section, the story we have to report here is much less exciting, partly because whatever happens in table 5 is reversible, at least to a certain extent. Both the immediate and long term effects are likely to be less earth-shaking, society-affecting, family-destroying, value shattering, and controversial than sterilization and abortion.

Some of the material in table 5 is already familiar from the earlier tables.[7] The 40 percent non-sterilized fall back on the pill, the condom, the IUD and a combination of other methods, in that order of importance. We do not know whether those aborting (anywhere between 60,000 and 150,000 annually) come out of the 40 per cent of users reported in this table or out of the 15 per cent of non-users (Balakrishnan et al. 1985, table 1), through most likely out of the non-users currently married (5.7), never married (4.5), or previously married (1.2).

Some of the new information in table 5 is: female sterilization is increasing with age, pill use is decreasing; male sterilization is increasing with age less decisively, and males married to women aged 45-49 refuse to contribute to the trend; not that it matters much. As this paper is being

TABLE 5. Currently married women using contraceptives and their distribution by method; according to selected characteristics, Canada 1984

Characteristic	N	% using	Method						
			Female ster.	Male ster.	Pill	IUD	Condom	Other*	Total
Currently married	3,283	73.1	41.7	17.6	15.0	8.0	10.8	7.0	100.0
Age-group									
18-24	326	61.3	6.0	4.0	58.5	10.5	14.5	6.5	100.0
25-29	645	58.2	18.4	10.2	33.0	10.9	16.1	11.4	100.0
30-34	679	75.4	36.5	20.1	13.1	12.9	11.3	6.2	100.0
35-39	663	81.4	53.1	20.7	4.1	7.8	8.5	5.7	100.0
40-44	513	78.0	58.5	26.0	2.0	2.8	5.5	5.3	100.0
45-49	457	68.1	65.0	16.4	0.3	1.6	10.6	6.1	100.0
Birth expectations									
Expect more	761	53.2	0.0	0.0	49.0	12.5	23.0	15.5	100.0
Expect no more	2,509	79.4	50.2	21.2	8.1	7.1	8.1	5.3	100.0
Religion									
Catholic	1,544	72.2	42.2	17.4	16.2	7.8	8.8	7.6	100.0
Protestant	1,224	74.4	44.1	19.4	13.6	7.4	10.2	5.4	100.0
Other or none	511	73.6	34.4	13.8	14.8	10.1	18.0	9.0	100.0
Church attendance									
Weekly	1,017	69.4	46.1	17.2	9.9	6.0	10.9	9.9	100.0
Sometimes	1,277	75.2	40.9	16.7	17.6	8.4	10.8	5.6	100.0
Rarely or never	985	74.3	38.6	19.2	16.6	9.4	10.54	5.6	100.0
Education (in years)									
≤ 8	296	64.9	71.0	11.9	7.3	2.6	4.7	2.5	100.0
9 - 11	810	73.1	50.3	22.1	11.5	5.2	5.9	5.0	100.0
12 - 13	1,174	73.8	37.0	19.0	19.0	8.1	10.1	6.8	100.0
Nativity									
Native-born	2,751	73.3	42.0	18.3	16.3	8.2	9.2	6.0	100.0
Foreign-born	532	72.4	40.5	14.0	8.6	7.0	18.7	11.2	100.0

* Diaphragm, spermicides, rhythm, withdrawal and others.

N.B.: The arrows are to draw attention within each characteristic to the category with greater incidence.

Source: adapted from PRL Reprint Nr 74, p. 212.

typed, their female partners are already off the stage. The two lines on birth expectations in table 5 tell us nothing and are merely a credit to the consistency of results and to the high quality of the field work.[8] The foreign born must consist of two kinds: those who adjust quickly to Canadian norms (some even before they come to this country; Basavarajappa and Halli 1986) and use sterilization in a manner similar to Canadian-born, and those who use traditional methods (popular in their home countries): condom and "other", and to a lesser extent the pill. Obviously, the potential for reversal in fertility trends among users of orthodox methods is greater than among the sterilizers, but they are a small group. The overall lesson from this and other evidence is that from the perspective of fertility immigration is inefficient: immigrants may be flooding the country with their own persons, but not with their children.

9. Fertility as a dependent variable

The previous section dealt with what might be called the mechanics of family planning and birth control: which methods are used by different socio-economic and demographic groups. In figure 5 these intermediate variables are shown as determining the dependent variable of fertility, but being themselves influenced by still other variables. There is no end to these other explanations: socio-psychological and socio-economic, some stressing the societal or macro level, some preferring to operate on the individual and family or micro level (e.g., McDaniel 1984a, 1984b).

The least metaphysical and, therefore, easiest to discuss are female labour force participation (flfp) and the economic circumstances of the family. These two are presented in the next two sections.

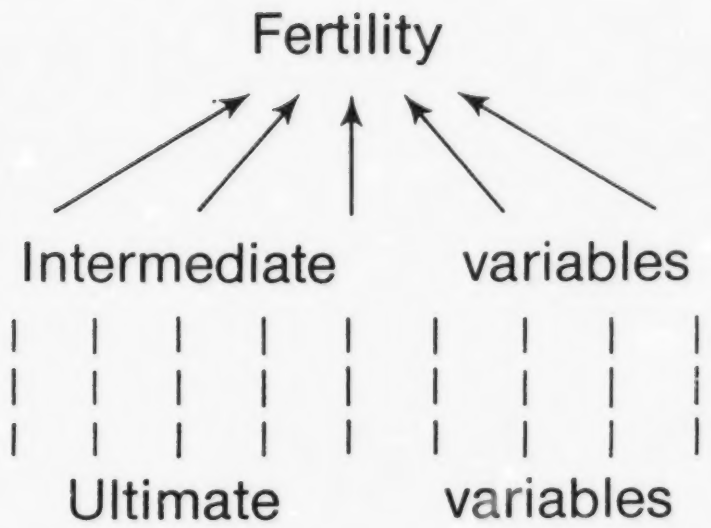


Figure 5: Fertility as a dependent variable:
a schematic presentation

10. Female labour force participation (flfp)

It is a reasonably well established principle in social sciences that fertility and flfp are conversely related: one interferes with the other, though it is less certain which way the causation works. Absence of children enables a woman to join the labour force, or she cannot have children as an effective labour force participant, or she must join the labour force to provide for the children. The principle has been with us for a long time, although some of us remember that in the 1940-s USA women did all three at the same time, contradicting sociological theory: they went to school in larger numbers and proportions, had increasing number of children, and joined the labour force to a greater extent.

Table 6 shows that flfp varies little with parities one, two and three, though a more refined table would show a more qualified picture. Only with parity four and higher does the flfp begin to drop. Parity zero or childlessness provokes schizophrenic conclusions. On the one hand, only by excluding parity zero do we obtain the expected result, that women never in the labour force have more children (2.70) than women ever in the labour force (2.25).[9] On the other hand, childless women seem to be a breed of their own. They make up 60 per cent of those never in the labour force. Peculiar and particular parasites? Neither increasing the national income nor increasing the nation's population size? Part of the trouble lies with the literature on childlessness, which is centred on the suggestion that a new mode of living is emerging.[10] In fact, periods were known in the past when childlessness was higher than currently. By getting their basic facts straight, writers on childlessness could provide real insights into their topic and help us collectively to understand what is happening to society.

TABLE 6. Female labour force participation by mother's parity, Canada 1984

	Parities					
	All	0	1	2	3	+3
All women	5315	1886	860	1407	737	1162
Women ever in labour force	4536	1442	790	1292	665	1012
Women never in labour force	779	444[1]	70	15	72	150
Women never in labour force as %-age of all women	14.7	23.5	8.1	8.2	9.8	12.9

	All women	Women ever in labour force	Women never in labour force
Number of children per woman, including women of all parities	1.48	1.60	1.16
Number of children per woman, excluding women of parity 0	2.29	2.25	2.70
Women of parity 0 as %-age of all women	35.5	33.1	57.0

1. Including 241 full-time students

Source: tabulations from Canadian Fertility Survey 1984

11. Poverty stricken Canada and female-selective injustices

Poverty stricken Canada, like injustices ridden Canada, is one of the clichés, that are so generally accepted that few question them. In fact, to suggest that Canadian income is higher and more evenly distributed than in most societies and that there is less injustice, less arbitrariness and more respect for due process than in most societies, is running the risk of being labelled a reactionary. From the perspective of this paper the cliché about poverty stricken Canada is of interest as an explanation of Canada's low fertility. The opinion prevails that "It takes nowadays two salaries to keep a family going". In fact, while the national income of Canada doubled and trebeled (in constant dollars, it goes without saying), Canadians put themselves into a state of mind believing that they are getting poorer and consequently cannot afford to have children. This perception may be more effective than objective measures in influencing decisions based on these perceptions. But even in terms of perceptions Canadians do not feel uniformly miserable, as can be seen from table 7.

At the time of marriage nearly four times as many (26.4%) thought themselves better off than their peers or four times as few (7.0%) thought themselves worse off. At the time of the interview they were even more cheerful than at the time of the marriage; seven times as many (34.4%) thought themselves better off. We might be pushing our luck too far by combining these two sets of subjective answers in the lower part of table 7. The combination does not increase the objective quality of the data. For whatever it is worth, 86 per cent thought themselves better off or the same since marriage.

TABLE 7. Social mobility in the eyes of CFS respondents, Canada 1984

		Own standard of living compared with same age group at the time of interview Q915			
		(1) better	(2) same	(3) worse	
Own standard of living compared with same age group at time of marriage Q914	better	14.8%	10.3%	1.3%	= 26.4%
	same	17.4%	46.8%	2.3%	
	worse	2.2%	3.8%	1.0%	= 7.0%
		34.4%		4.6%	n=3699

Standard of living since marriage		
improved (4)	remained same (5)	worsened (6)
17.4	14.8	10.3
2.2	46.8	1.3
3.8	1.0	2.3
23.4 +	62.6 +	13.9 = 100.0

Q914: Question 914: When you got married, or when you started living together, was your standard of living better than, the same as, or worse than that of people you knew in your age group?

Q915: Question 915: And now, is your standard of living better than, the same as, or worse than that of people you know in your age group?

Source: tabulations from Canadian Fertility Survey 1984

In table 8, first one third, the expected family size is about the same (2.37, 2.33, 2.34), regardless of financial success. Whatever view the female respondent had on the well-being of the couple at the time of the marriage in the second third of table 8, it is not correlated with the income at the time of the interview. The current income reported in the middle third of table 8 is about the same for all three groups, suggesting that all income groups have about the same proportions of cheerful wives and grumbling wives, that is to say, the cheerfulness of wives depends on their nature, and not on the family income. Arguably, the correlation need not be directly relevant because of the passage of time and faults of recollection, but it does imply a loose connection between the cheerfulness of Canadians and their dollars. However, answers to question 915 in the last third of table 8 tally closely with the reported income: better off report $39,006 no change report $34,073, worse off $23,761. Yet, the poorer they are (or the worse they feel), the more children they expect.

One may conclude not only that the perception of poverty stricken Canada is faulty in itself, but that it does not seem to affect family building plans in the direction expected. We are left with the conclusion that income (its relative variety?) may not be a depressant at the level of the individual family, but that at the societal level the psychosis of general poverty works. To clinch the issue with a puzzle: in figure 6 live births are plotted against family income. For Canada as a whole, excluding the Atlantic provinces, the behaviour is, as expected by economic theory: the number of children rises with income, though very mildly. In the Atlantic provinces parents seem to be impressed much more with the first $40,000 of family income, somewhat less with higher levels of income. We obviously

TABLE 8. Some subject answers to attitudinal questions compared with family income, Canada 1984

		n	Average family income in $[1]	Expected family size[4]
From a financial standpoint do you feel that you have				
Q800	been very successful?	1195	39,546	2.37
	been reasonably successful?	3631	31,348	2.33
	not been successful?	476	18,572	2.34
	missing information?	13	------	
When you married, or when you started living together, was your standard of living ... than that of people you knew in your age group?				
Q914	better	979	37,071[2]	
	the same	2471	35,501[2]	
	worse	262	35,701[2]	
	missing information[3]	1603		
And now, is your standard of living ... than that of people you know in your age group?				
Q915	better	1277	39,006	2.40
	the same	2259	34,973	2.44
	worse	175	23,761	2.63
	missing information[3]	1604	------	

1. These dollar values have been calculated on only part of the respondents, that is excluding the 679 respondents, who reported neither family income nor any component part of the individual income so that family income could not be imputed.
2. These dollar values give the 1984 income, not the income at the time of the unions.
3. Consists mainly of 1592 never married.
4. Similarly to 1 above.

Source: tabulations from Canadian Fertility Survey 1984

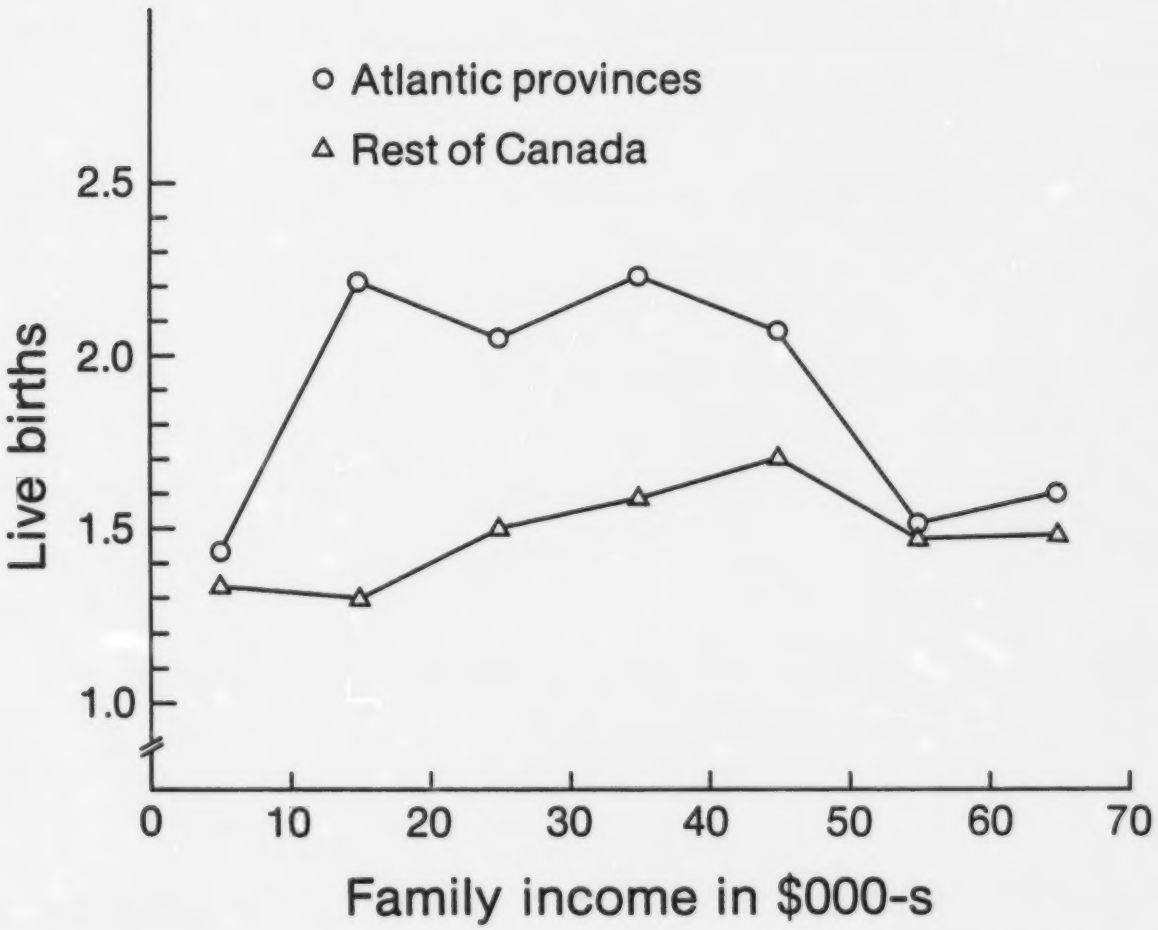


Figure 6: Live births and family income 1984,
Atlantic provinces and the rest of Canada

still do not know enough about the interrelations between dollars and children, but that Canada is poverty stricken does not seem to be the explanation. Money does not work at the family level; it does not work at the provincial level. In fact and in logic it should not work at the national level. There must be other explanations.

12. Brain wash penetrated the most neutral sanctuaries

The belief in poverty stricken Canada and the worsening of the economic situation is not merely a feature peculiar to North American psychology or the stage through which this feature of social psychology is moving just now. It is fed subtly through the type of information reported and the emphasis with which the information is presented. The massage is the message.

For example, on the front page of The Daily Statistics Canada for 20 April 1988, it is stated that the "average ... family income declined ... from 1980 to 1985" (in constant dollars). One has to look inside the bulletin (page 12) to find that this decline of 1.2 pear cent was accompanied by a drop in family size from 3.26 persons to 3.15 persons. The decline in family size caused a consequent increase of 2 per cent in the income per family member.

The inside of the bulletin also reveals that the decline was limited to the period 1980-1984, that it began to reverse itself in 1985 and continued the recover in 1986 (page 11). As another aspect of the same editorial tendency, the overall incidence of poverty is reported on the front page to have increased from 1980 to 1985. One has to look inside again to find the admission that "the incidence of low income declined in ... (1986) to a level

... below the 1980 level" (page 14). The editors clearly kow-tow to the Canadian preference for feeling miserable.

My listeners and readers may wonder why have I dug up these nuances and included them in this paper about the demographic future of our society? The reason is the probable and presumed anti-natalist impact on the family building plans of the population. Other features with an impact on the society might be coming out of the 1986 population census, features ringing an anti-natalist bell. There is no need for editorial assistance when there is no such anti-natalist message. The basically incorrect statement that family incomes declined is qualified by the explanation that families where wives work, did better than families where wives did not work, an outcome reinforced by women's position improving even faster than that of men.

The discouragement of marriages is reinforced by table 5 on page 17 of the publication cited, where it is shown that never married women aged 55 and more earn more than men. The age distribution of the marital category "never married" starts at age 15 with 85 per cent of male earnings and concludes at 65 plus with 104 per cent, the average for all age groups being 90 per cent, a far cry from the 60 per cent firmly placed in public belief and persistently quoted. There is little public awareness of these figures and for the sake of a peaceful life one perhaps should not dwell on them unduly. Once brought into the public domain they would probably have in the first instance an anti-nuptiality impact, and only subsequently an anti-fertility one. For individual decision makers, the increase in public awareness is not needed. They are likely to see for themselves that they will be better off, if they refuse the marriage offer from an increasingly disadvantaged male.

It is fine to work while married instead of having children, but it is finer still to work without being married.

13. Will the earliest Easterlin theory work in Canada?

A number of conclusions are available from tables and figures not shown in this paper:

(i) reverse correlation between parity and wage over the years at constant dollars;

(ii) women with lower parities can apparently afford to be choosey on the labour market;

(iii) one explanation of phenomena (i) and (ii) would be acceptance of psychological predistination for the same woman to have high parity and

be disadvantaged in the labour force.

Even if it were shown that the higher the parity the greater the disadvantage of the mother in the labour force, it is not clear whether Canadian society has already adopted the value system according to which a mother must be "compensated" for having children.[11] Some couples may still fall back on individual decisions and responsibilities. Nor is it clear whether the adoption of a value system stressing social responsibility would be pronatalist or antinatalist.

Suggestions have come from respectable typewriters and word processors, that fertility is such an unnatural proceeding for a woman, that one must wonder that it has ever been undertaken. Only contraceptive ignorance and anthropological inertia can be explanations. In the context of such literature the women's readiness to go into the labour market with all its

discriminations can be more easily understood; they must hate married life and motherhood even more. If anything of this is realistic then Easterlin has no role to play.

For each parity, declines in real wages, reported on the basis of recollection, apparently took place over the 20 years under investigation:

(a) it could be that respondents were over-reporting for the early part of the 20 years; it was somehow beyond their comprehension and belief that in these distant years they could have been earning "that little" in terms of current dollars;

(b) in accordance with the Easterlin theory, baby boomers suffered, while preceding smaller generations, aged 40-49 in 1984 (that is born 1935-1944) benefitted and had higher reported real wages than those of the following baby boomers;

(c) increased female labour force participation (that is increased supply), did what it should have done according to economic theory; it depressed the price of labour, that is wages.[12]

The first baby busters, born 1966-1968, by 1988 entered the labour market aged 20-22. Observers of the social scene expect for these new recruits, in accordance with economic theory, decreasing rates of unemployment, increasing relative wages, telescoping wage differentials by age with older age groups (the baby boomers) and ... development of euphoric attitudes towards family building. The next few years will decide for or against the confirmation of the theory.[13] The complete and elegant Easterlin operates within the framework of given consumer preferences for material goods, changing pressures of liabilities, changing tastes for goods

and services, changes in relative income and the like (e.g., Hawthorn 1970:62).

14. There is no free lunch, there is no catching up

Most of fertility arises still within marriage, even if less so than in days gone by. It agrees with common sense and is supported with voluminous data, that the later the age at marriage the lower the fertility, and vice versa, the earlier the age at marriage the higher the fertility (except for the earliest and precocious ages, when in the case of very young brides maternal health is impaired).

Table 9 gives national data from the Canadian Fertility Survey 1984. Looking at the table first horizontally, we see that for each marriage cohort, the later the age at first birth the lower the number of children. There is not one exception. Looking at the table vertically, we see that for each age at first birth the number of children ever born decreases the more recent the marriage cohort There is not one exception. What it means is that whether the first birth takes place early or late, once the decline sets in, it affects everybody. Admittedly, the decline from marriage cohort to marriage cohort is exaggerated in that the more recent cohorts are subject to what is called in the literature censoring or truncation, and no allowance has been made for this phenomenon in table 9. The space in the table marked "Fertility below replacement" is still small and changes could take place. It is this area where the action is and it deserves watching for signs of change. If there is no change, then Canadians will be dying out in the statistical sense and one or two other senses. Obviously, the land will not

TABLE 9. Mean number of children ever born by mother's age at first birth and mother's marriage cohort, Canada 1984

Marriage cohort (1)	Age at first birth: less than 20 (2)	20 - 24 (3)	25 and over (4)	all ages (5)
all cohorts	2.96	2.46	1.91	2.39
before 1965	3.85	3.09	2.23	3.15
1965 - 1969	2.71	2.53	2.69	2.44
1970 - 1974	2.44	2.30	1.95	2.19
1975 - 1979	2.25	1.83	1.60	1.80
1980 - 1984	1.66	1.33	1.27	1.39
n	664	1586	1002	3252

FERTILITY BELOW REPLACEMENT

childless married	625
...	3877
childless never married	1438
all respondents	5315

Source: adapted from Rao & Balakrishnan 1986

become depopulated. Something will fill it up, but it will be a different country.

Not shown in this paper, but available elsewhere, is the fact that the high fertility of early starters over late starters has been steadily decreasing. What used to be a difference of the order of two births is likely to be narrowed to half a child. How do the early starters ensure that they do not get too much ahead of the late starters? As has been shown in the section on sterilization and in related literature, they do it mainly through the application of this radical and irreversible method. Tubal ligations are particularly popular among the less educated, who make up a large proportion of the early starters with, until recently, high lifetime fertility (Balakrishnan et al. 1985).

Early childbearing will apparently still continue to exact the price of foregone education for the mother, consequent limited chances for the child, increased probability of marital dissolution, and negative economic situations for the couple. Thus, the crudity of the experience shows itself not only in its immediate application, but it stays with the users whether they have recourse to sterilization or not. The original villain of the piece is not sterilization, but the early age at first birth. But having gone into early childbirth, then in the prevailing value system of the society and the clumsiness of the social classes most affected, a mother has no other, equally easy way out as sterilization.

There are various ways of denying the alarmistic dimensions of the presentation in this paper.

1. It has happened before; not true. There were some dips below 2.0 in the past, but they were short-lived and never so deep.

2. An upturn can be expected, if it has not already started. The fact is, that as of today, it has not and there is no sign of change. The possibility is beyond our expectations.

3. Immigrants will fill in the empty spaces. There is an immigration programme for moneyed entrepreneurs, why not for orphaned adoptees from, say, South Korea.

4. The numbers required, when the decline reaches German proportions, would be so large that arrivals would swamp the anthropological culture of Canada. The new arrivals tend to pick up the low fertility habits and continuing replenishment by immigration would be necessary.

What of the future? Will population policies help? Assuming that they are willed by the society, can they help? Experience of many attempts in the world suggests that their effect is short-lived. Basically, we do not know what would help.

Allow me to draw a quick parallel with crime. The Age of Enlightenment started with the conviction that poverty and ignorance were the prime causes of crime. Over the past 40 years an unprecedented growth of the crime has been accompanied by an equally unprecedented growth in living standards and in the spread of education. Note that these two developments are also used as explanatory factors in the study of fertility.

Criminologists then began to look to new, specific and narrower causes: parental behaviour, urban areas, population densities, poverty, poor housing, television, social and physical mobility, decline in family life, decline in religion. Some of them are operational, say, poor housing, but no government of a developed country could tackle, say, decline in religion.

Similarly, in the realm of population policy a large number of variables

has been studied, but few are operational. Much depends on the societal will. When in the budget of May 1986 the deindexation of old age pensions and of family allowances was proposed, the outcry of the elderly cancelled the deindexation of their pensions. Nobody spoke up on behalf of mothers.[14] We do not know whether child care programmes are pro or anti-natalist in their influence. The point is that they were not considered from that standpoint.

These programmes were considered from the standpoint of feminism and possibly egalitarianism. Would it, now, be an exaggeration to say that feminism made the "mere" raising of children discreditable? The new career woman in her late 30-s with one child as a concession to posterity or as a new "life experience" is, after all, a heroine of our age. Yet, it could be argued that career women should be ready to follow non-traditional paths without trying to reeducate everybody and seeking mass approval from large numbers choosing more traditional routes. Presumably the attempt to embalm and ennoble either one or the other with ointments of superiority has no place in objective reasoning. Is that a realistic stand to take in the closing years of the twentieth century? Probably not, though North American societies are volatile and have been known to ride pendulums.

ENDNOTES

* The capable research assistance of David Odynak and Fakhrul I. Chowdhury is gratefully acknowledged.

1. "Give the Fuehrer a war time child" - even if the husband was temporarily busy in the snow swept planes of Russia.

2. We do not need for the general flow of the argument to stop over the difference between the mean and the median ages at first marriage. The mean ages are usually lower than the median ages, though their general pattern over time is similar and parallel. It might be illustrative to say why this is so. The large number of youngsters marrying pulls down the mean, but their youth leaves the median unaffected. At second and subsequent marriages the mean age is sometimes above the median, when spectacularly older couples marry affecting the mean but leaving the median unaffected by their golden ages.

3. In the interest of saving space, figures 1 through 4 and 6 are not being supported with their background tabular material.

4. During a visit to family planning establishments in Liberia after the paper was delivered, I saw a number of posters carrying the family planning message, a difficult task in a society where school girls look with envy at a class mate who became pregnant. One of the posters drew attention to sugar daddies, showing an older office manager or clerk drawing to his lap a younger office girl. In the Liberian circumstances this need not be discouraging at all, but even in Canada the poster would have to be based on the assumption that sugar daddies make one pregnant. The more likely contribution of sugar daddies is to overall promiscuity and consequently lower fertility, though one would not base a society's population policies on such premises. One wonders whether such a poster is a manifestation of militant feminism, or genuine a way of spreading family planning information.

5. Where both partners were sterilized, only the female sterilization was counted.

6. The behaviour of males reported in table 3 does not form an easily identifiable pattern. It is also not obvious what theoretical framework to apply to accommodate the availability of these data and the possible influence of macho considerations in the delicate area of male versus female decision making.

7. Percentages given in table 5 are somewhat higher than the corresponding percentages in table 3 because 100 per cent in table 5 is somewhat smaller, being limited to "current users".

8. Half of those expected to have children are on the pill and are apparently unaffected by the possibility of long term effects of pill usage (non smokers under age 35?).

9. Elaborate and painstaking attempts to pinpoint the influence of flfp on fertility and the other way round, mainly through the life cycle approach and multivariate analysis, have not, so far, yielded additional insights.

10. Some people tend to make mass myth out of their personal experiences. A prominent social scientist on exchanging a fourth wife developed an entire socio-psychological theory explaining why increasingly younger partners are inevitable.

11. Compensations result by definition in distortions other than the one intended. They may all be welcome socially and individually, but the point is that social scientists did not pose the relevant question and did not seek relevant answers.

12. No attempt has been made in the literature to separate the influence of increased female labour supply on the market and genuine female-selective discrimination as factors explanatory of the sex-differentials in wage rates.

13. For a recent elaboration of the Easterlin theory see Easterlin and Crimmins 1985, but earlier versions are more directly relevant to the argumentation of this paper.

14. In this century at the sinking of the Titanic women and children were the first to climb into lifeboats. Even today, a mother with a child would not treat with disdain the offer of a seat.

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